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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,977	06/02/2000	Masanao Fujieda	04917.0075	3091

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EXAMINER

HESSELTINE, RYAN J

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 05/09/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/584,977

Applicant(s)

FUJIEDA, MASANAO

Examiner

Ryan J Hesseltine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Objections*

2. Claim 10 is objected to because of the following informalities: line 4-5 states, “eye designating means for designating whether an eye to be operated is a right eye or a left eye.” It is assumed that applicant intended this to read “...eye to be operated *on* is a right eye ...” Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 13, 15, and 17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The last limitation in each of the above mentioned claims states, “storing the measurement data in association with at least one identification code that is obtained by integrating the identification codes if it is judged that the identification codes match.” Page 26, line 2-8 apparently discusses this limitation, but this section only discloses that the identification code that is transferred later is discarded to avoid storing the same identification codes in duplication. There is a parenthetical reference stating, “to integrate into at least one

identification code,” but it is unclear what applicant meant by this statement. For examination purposes, it has been assumed that this limitation involves updating the existing stored information corresponding to the first-stored identification code with the information corresponding to the matching, later-transferred identification code.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4, 6, 7, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Flom et al. (USPN 4,641,349), hereafter Flom, referenced on applicant’s IDS.

7. Regarding claim 1, Flom discloses an ophthalmic apparatus comprising: optometry means for examining or measure a patient’s eye to obtain measurement data (pupil size) on the eye (column 5, line 22-37); photographing means (video camera; column 7, line 10-15) for photographing the eye (column 4, line 66-68); identification code generating means for extracting a characteristic (descriptor), which is inherently unique to the eye (column 4, line 37-43), from an image of the eye photographed by the photographing means and generating an identification code (descriptor set) for the use of the eye identification based on the extracted characteristic (column 7, line 44-64); and output means for outputting obtained measurement data in association with the generated identification code (drive pupil across range of it’s size and measure to determine whether is equals the desired predetermined size  $x_n$ , extract nth

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descriptor set for each size and compare to one or more reference descriptor sets; column 11, line 38-67).

8. Regarding claim 6, Flom discloses an ophthalmic apparatus comprising: photographing means (video camera; column 7, line 10-15) for photographing a patient's eye (column 4, line 66-68); identification code generating means for extracting a characteristic (descriptor), which is inherently unique to the eye (column 4, line 37-43), from an image of the eye photographed by the photographing means and generating a first identification code (descriptor set) for the use of the eye identification based on the extracted characteristic (column 7, line 44-64); input means (stored on credit card, ID card, or memory of a computer system) for inputting measurement data on the eye obtained by a different ophthalmic apparatus in association with a second (reference) identification code, which is generated in the same form as the first identification code; comparison means for comparing the first identification code and the second identification code to see if they match (column 11, line 65 to column 12, line 10); and informing means for informing a result of the comparison (identified or not) by the comparison means (column 12, line 11-17).

9. Regarding claims 2 and 7, Flom discloses that the identification code generating means generates the identification code based on an iris pattern of the eye (column 4, line 37-50).

10. Regarding claims 4 and 12, Flom discloses that the photographing means includes at least one selected from a group of a camera for photographing an anterior eye segment, a camera for alignment, and a camera for optometry that is included in the optometry means (column 7, line 10-15; column 10, line 56-65).

***Claim Rejections - 35 USC § 103***

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11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flom in view of Okubo (USPN 4,461,028).

13. Regarding claims 13 and 15, Flom discloses an ophthalmic apparatus and a method for managing ophthalmic data comprising steps of: inputting measurement data on a patient's eye (stored on credit card, ID card, or memory of a computer system), to which an identification code is assigned (column 11, line 65 to column 12, line 10), the identification code being generated based on a characteristic, which is inherently unique to the eye (column 4, line 37-43); and comparing the identification codes assigned to the inputted measurement data to see if they match in the case where a plurality of measurement data are inputted (column 11, line 65 to column 12, line 10). Flom does not explicitly disclose storing the measurement data in association with at least one identification code that is obtained by integrating the identification codes if it is judged that the identification codes match.

14. Okubo discloses an identifying system including collating speech analysis patterns to identify a person and that when a speaker's pattern and a reference pattern are found to be identical, the reference pattern in the memory is updated (integrated; column 6, line 6-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to update the reference pattern in the memory when a person is identified as taught by Okubo in

order to continuously maintain the reference pattern as the patterns may eventually alter with time (column 6, line 15-24).

15. Regarding claims 14 and 16, Flom discloses outputting measurement data selected from the stored measurement data (stored on credit card, ID card, or memory of a computer system), wherein the identification code is assigned to the selected measurement data (column 12, line 3-10).

16. Regarding claim 17, Flom discloses an ophthalmic system comprising an ophthalmic apparatus and a data management apparatus, wherein the ophthalmic apparatus includes: optometry means for examining or measure a patient's eye to obtain measurement data (pupil size) on the eye; photographing means (video camera) for photographing the eye; identification code generating means for extracting a characteristic (descriptor), which is inherently unique to the eye, from an image of the eye photographed by the photographing means and generating an identification code (descriptor set) for the use of the eye identification based on the extracted characteristic; and output means for outputting obtained measurement data in association with the generated identification code (see above discussion of claim 1), and the data management apparatus includes: comparison means for comparing the identification codes assigned to the inputted measurement data to see if they match in the case where a plurality of measurement data are inputted (column 11, line 65 to column 12, line 10); and storage means for storing the measurement data in association with at least one identification code that is obtained by integrating the identification codes if it is judged that the identification codes match (see above discussion of claims 13 and 15).

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17. Claims 3, 8-11, 19, and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Flom as applied to claims 1 and 6 above, and further in view of McMillen et al. (USPN 6,296,634), hereafter McMillen.

18. Regarding claims 3 and 9, Flom discloses that the identification code generating means generates different (first) identification codes for a right eye and a left eye (each eye of any person is different from that of his other eye) of the same patient (column 4, line 43-45), but does not disclose that the output (input) means separately outputs (inputs) the measurement data on the right eye and the left eye in association with the identification codes that correspond to each eye. McMillen discloses an ophthalmic surgery technique with active patient data card on which is recorded the prescription of the patient to control the amount and type of laser surgery on a particular patient and the eye upon which surgery will be allowed (e.g. right eye only, left eye only, or both eyes; column 4, line 64 to column 5, line 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to separately output (or input) the measurement data on the right eye and the left eye in association with the identification codes as taught by McMillen in order to include information pertinent to both eyes including the amount and type of surgery to be performed on the designated eye or eyes.

19. Regarding claim 19, Flom discloses an ophthalmic system comprising an ophthalmic apparatus wherein the ophthalmic apparatus includes: optometry means for examining or measure a patient's eye to obtain measurement data (pupil size) on the eye; first photographing means (video camera) for photographing the eye; first identification code generating means for extracting a characteristic (descriptor), which is inherently unique to the eye, from an image of the eye photographed by the first photographing means and generating a first identification code



(descriptor set) for the use of the eye identification based on the extracted characteristic; and output means for outputting obtained measurement data in association with the generated first identification code (see above discussion of claim 1). Flom further discloses input means for inputting the outputted measurement data in association with the first identification code; comparison means for comparing the first identification code and a second (reference) identification code to see if they match (which inherently includes a “second photographing means” and “second identification code generating means” to create the stored reference pattern with which the first code is compared); and informing means for informing a result of the comparison by the comparison means (see above discussion of claim 17). Flom does not disclose that the ophthalmic system includes a surgery apparatus.

20. McMillen discloses an ophthalmic surgery apparatus including surgery means for performing surgery on the eye (column 4, line 3-9) in addition to the use of a patient data card which provides the surgery apparatus with identifying data including the serial number of the specific laser surgery system to be used, personal identification number of the surgeon qualified to operate the system, and the prescription of the patient to control the amount and type of laser surgery on a particular patient (column 4, line 54 to column 5, line 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to control access to an eye surgery apparatus as taught by McMillen in order to ensure that the correct surgical procedure is performed on the person for which it was intended, by a person (surgeon) who is authorized and capable of performing it (column 5, line 8-17).

21. Regarding claims 8 and 20, McMillen discloses surgery means for performing surgery on the eye; and restricting means for restricting the surgery performed by the surgery means based on the result of the comparison by the comparison means (see above discussion of claim 19).

22. Regarding claim 10, McMillen discloses surgery means for performing surgery on the eye (see above discussion of claim 19); and eye designating means for designating whether an eye to be operated on is a right eye or a left eye, and wherein the input means separately inputs the measurement data on the right eye and the left eye in association with the second identification codes that correspond to each eye (column 4, line 64 to column 5, line 7), and the comparison means compares the first identification code and the second identification code of the eye designated by the eye designating means to see if they match (see discussion of claim 6).

23. Regarding claim 11, Flom does not disclose an eye surgery means or a means for obtaining surgery data from the measurement data. McMillen discloses surgery means for performing surgery on the eye (see above discussion of claim 19); arithmetic means for obtaining surgery data from the inputted measurement data, wherein the second identification code (patient data card) in association with the inputted measurement data is assigned to the surgery data (column 5, line 44-52); and control means for controlling the surgery means based on the obtained surgery data (column 5, line 53-62), and wherein the comparison means compares the first identification code and the second identification code assigned to the surgery data to see if they match (see discussion of claim 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain surgery data from the measurement data as taught by McMillen in order to ensure that the correct surgical procedure is performed on the

person for which it was intended, by a person (surgeon) who is authorized and capable of performing it (column 5, line 8-17).

24. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flom as applied to claim 1 above, and further in view of Fujieda et al. (USPN 6,033,075), hereafter Fujieda, cited on applicant's IDS.

25. Regarding claim 5, Flom does not disclose that the optometry means includes at least one selected from a group of means listed in claim 5. Fujieda discloses an ophthalmic apparatus including *at least one* optometry means *selected from a group of* (emphasis added) objective refractive power measuring means, subjective refractive power measuring means (column 7, line 20-29), corneal shape measuring means, intraocular pressure measuring means, ophthalmic photographing means and ophthalmic analyzing means (column 6, line 50-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select at least one optometry means from the group of means listed above as taught by Fujieda in order to obtain a plurality of measurement data of an eye to determine an operation amount for corrective surgery (column 11, line 8-23).

26. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flom in view of Okubo as applied to claim 17 above, and further in view of Shamos (USPN 5,071,168).

27. Regarding claim 18, neither Flom nor Okubo disclose that the ophthalmic system comprises a plurality of ophthalmic apparatus. Shamos discloses a patient identification system including a centralized hospital information system in which all departments and stations, each having their own user console, are able to access a centrally stored computer data bank of patient information (column 5, line 62 to column 6, line 2). Once admitted to the hospital, a patient may

be taken to one or more departments, such as surgery, where each of these departments is provided with a live print scanner (such as a fingerprint scanner; column 6, line 16-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a plurality of apparatus for identification as taught by Shamos in order to allow all departments and stations to access a centrally stored computer data bank of patient information such that each department can identify a patient for treatment.

### *Conclusion*

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 6,173,068 to Prokoski discloses a method and apparatus for recognizing and classifying individuals based on minutae including identifying patients and positioning a surgical device using blood vessel patterns. USPN 5,926,555 to Ort et al. discloses a fingerprint identification system including selecting the best quality pairs for match and updating the file repository to renew, refresh, and improve quantity and quality. USPN 5,157,603 to Scheller et al. discloses a control system for ophthalmic surgical instruments including a preprogrammed key which adjusts system parameters for a particular surgeon. USPN 4,669,466 to L'Esperance discloses a method and apparatus for analysis and correction of abnormal refractive errors of the eye.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan J Hesseltine whose telephone number is 703-306-4069. The examiner can normally be reached on Monday - Friday, 8 AM - 4:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

rjh  
April 29, 2003

  
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